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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 07/27/2004

EXAMINER

FOLEY, SHANON A

ART UNIT

PAPER NUMBER

1648

DATE MAILED: 07/27/2004

Mary L Miller
Needle & Rosenberg
127 Peachtree Street N E Suite 1200
Atlanta, GA 30303-1811

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,862	09/28/2001	Steven Oberste	14114.0353U2	8841

TITLE OF INVENTION: TYPING OF HUMAN ENTEROVIRUSES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$0	\$1330	10/27/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE
Commissioner for Patents
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or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 07/27/2004

Mary L Miller
Needle & Rosenberg
127 Peachtree Street N E Suite 1200
Atlanta, GA 30303-1811

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)

(Signature)

(Date)

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nonprovisional	NO	\$1330	\$0	\$1330	10/27/2004

EXAMINER	ART UNIT	CLASS-SUBCLASS
FOLEY, SHANON A	1648	435-005000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
<input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. <input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	1 _____ 2 _____ 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): individual corporation or other private group entity government

4a. The following fee(s) are enclosed:

4b. Payment of Fee(s):

- Issue Fee
- Publication Fee (No small entity discount permitted)
- Advance Order - # of Copies _____

- A check in the amount of the fee(s) is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- b. Applicant is not claiming SMALL ENTITY status. See, e.g., 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

(Authorized Signature)

(Date)

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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TRANSMIT THIS FORM WITH FEE(S)



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7590	07/27/2004		EXAMINER	
			FOLEY, SHANON A	
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			1648	

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Mary L Miller
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127 Peachtree Street N E Suite 1200
Atlanta, GA 30303-1811

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability	Application No.	Applicant(s)	
	09/937,862	OBERSTE ET AL.	
	Examiner Shanon Foley	Art Unit 1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 7/9/2004.
2. The allowed claim(s) is/are 1,2 and 6-11.
3. The drawings filed on 28 September 2001 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

EXAMINER'S AMENDMENT

It is currently noted that claim 2 of the instant amendment is dependent on claim 1 and that in the previous amendment, claim 2 was inadvertently dependent upon itself. It is determined that this claim has never been amended since the instantly presented claim 2 is an exact copy of the originally presented claim 2.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gwendolyn D. Spratt (Registration No. 36,016) on July 23, 2004.

The application has been amended as follows to correct inadvertently omitted words in the amendment submitted July 9, 2004:

In claim 1, line 3, --RNA-- was inserted after "purifying".

In claim 1, line 4, --transcribing-- was inserted after "reverse".

In claim 1, line 5, --provide-- was inserted after "to".

In addition, claim 8 has been amended to depend on claim 1 to avoid repetition of the limitations recited in claim 7.

The following is an examiner's statement of reasons for allowance:

As stated previously, the prior art does not teach or suggest a primer comprising SEQ ID NO: 19 or using a primer comprising SEQ ID NO: 22 with a primer comprising SEQ ID NO: 19.

The prior art also does not teach or suggest the use of SEQ ID NO: 86 in combination with SEQ ID NO: 83, SEQ ID NO: 84 or SEQ ID NO: 85. The prior art does not teach or suggest SEQ ID NO: 83 or SEQ ID NO: 84.

Regarding SEQ ID NO: 85, US 6,551,795 teaches SEQ ID NO: 19947, which has 100% sequence identity to the instant SEQ ID NO: 85, see the sequence alignment provided. However, US 6,551,795 does not teach or suggest this sequence in combination with the instant SEQ ID NO: 86.

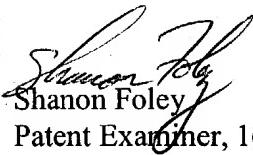
In addition, the sequence of SwissProt database accession no: P12915 submitted October 1, 1998, possesses 100% sequence identity to the instant SEQ ID NO: 85, see the sequence alignment provided. However, there is no teaching or suggestion for using this sequence in combination with SEQ ID NO: 86, which is required by the instant claim 6.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanon Foley whose telephone number is (571) 272-0898. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on (571) 272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shanon Foley
Patent Examiner, 1648

Notice of References Cited

Application/Control No.

09/937,862

Applicant(s)/Patent Under

Reexamination

OBERSTE ET AL.

Examiner

Shanon Foley

Art Unit

1648

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	sequence alignment of instant SEQ ID NO: 85 with SEQ ID NO: 19947 of US Patent 6,551,795 in the Issued Patents AA database with an earliest prior filing date of February 18, 1998.
	V	sequence alignment of instant SEQ ID NO: 85 with SwissProt database accession no: P12915 submitted October 1, 1998.
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

RESULT 1
US-09-252-991A-19947, Application US/09252991A
; Sequence 19947, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252.991A
; CURRENT FILING DATE: 1999-02-18
; PRIORITY NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 19947
; LENGTH: 143
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
; US-09-252-991A-19947

Query Match Best Local Similarity 100.0% Score 7; DB 4; Length 143;
Matches 7; Conservative 100.0% Pred. No. 0.45; Mismatches 0; Indels 0; Gaps 0;

QY 1 QAAFTGAA 7
DB ||||||| 85 QAAETGAA 91

RL J. Gen. Virol. 69:253-263 (1988).

RN [2] X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS) OF 2-B40.

RP MEDLINE=95292108; PubMed=773791;

RX Methyl M., Rate J., Hoey E.M., Lyons C., Martin S.J., Stuart D.;
RA "Implications for viral uncoating from the structure of bovine
enterovirus."

RT Nat. Struct. Biol. 2:224-231 (1995).

CC -1- FUNCTION: P3C POLYPEPTIDE IS A PROTEASE THAT CLEAVES AT CERTAIN
CC Q/G SITES IN THE POLYPEPTIDE. IT MAY BE A CYSTEINE PROTEASE.CC -1- CATALYTIC ACTIVITY: Selective cleavage of Gln [\rightarrow Gly] bond in the
CC poliovirus polyprotein. In other Picornavirus reactions Glu may be
CC substituted for Gln, and Ser or Thr for Gly.CC -1- CATALYTIC ACTIVITY: N nucleoside triphosphate = N diphosphate +
CC [RNA] (N).CC -1- SUBUNIT: The virus capsid is composed of 60 icosahedral units,
CC each of which is composed of one copy of proteins VP1, VP2,
CC VP3, and VP4.CC -1- PTM: Specific enzymatic cleavages in vivo yield mature proteins.
CC -1- SIMILARITY: THE PROTEASE BELONGS TO PEPTIDASE FAMILY C3.

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DR EMBL; D00214; BAA24003_1; ALT_SEQ.

DR PIR; A29824; GNYVB.

DR PDB; 1BEV; 16-SEP-98.

DR MEROPS; C03_UPA; -.

DR C03_UPB; -.

DR InterPro; IPR04004; Calicivirus_Pol_hel.

DR IPR09003; Cys_ser_trypsin.

DR IPR00199; Pept3C_Picorn.

DR IPR00081; Peptidase_C3.

DR IPR003138; Pico_PIA.

DR IPR002527; Pico_PIB.

DR IPR001676; Rhv.

DR IPR00605; RNA_helicase.

DR IPR07095; RNA_pol_DS_Ps.

DR IPR001205; RNA_pol_P3D.

DR IPR00794; RNA_pol_PSVir.

DR IPR008975; Viral_cap_protein.

DR Pfam; PF00548; Cys_protease-3C; 1.

DR Pfam; PF00226; Pico_P1A; 1.

DR Pfam; PF00947; Pico_P2A; 1.

DR Pfam; PF01552; Pico_P2B; 1.

DR Pfam; PF00073; rhv; 3.

DR Pfam; PF00680; RNA_dep_RNA_pol; 1.

DR Pfam; PF00910; RNA_helicase; 1.

DR PRINTS; PB00918; CAJICUTRUSNS.

DR Prodrom; PD001155; Cys_protease-3C; 1.

DR Prodrom; PD001306; Pico_P2A; 1.

DR Prodrom; PD00124; Pico_P2B; 1.

KW Polypeptide; Coat protein; Core protein; Transferase; Myristate;
KW 3D-structure; Lipoprotein.

FT CHAIN 2 69 COAT PROTEIN VP4.

FT CHAIN 70 317 COAT PROTEIN VP2.

FT CHAIN 318 559 COAT PROTEIN VP3.

FT CHAIN 560 840 COAT PROTEIN VP1.

FT CHAIN 841 990 CORE PROTEIN P2A.

FT CHAIN 991 1059 CORE PROTEIN P2B.

FT CHAIN 1090 1419 CORE PROTEIN P2C.

FT CHAIN 1420 1508 CORE PROTEIN P3A.

FT CHAIN 1509 1531 GENOME-LINKED PROTEIN VFG.

FT CHAIN 1532 1714 PICORNAIN 3C.

FT CHAIN 1715 2175 RNA-DEPENDENT RNA POLYMERASE P3D.

FT LIPID 2 1672 N-myristoyl_glycine (in host).

FT ACT_SITE 1678 1678 PROTEASE (POTENTIAL).

RESULT 2
POLG_BOVE STANDARD; PRT; 2175 AA.
 ID P12975; P1-1989 (Rel. 12, Created)
 DT 01-OCT-1989 (Rel. 12, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DB Genome Polyproteins [Contains: Coat protein VP4 (P1A); Coat protein VP2 (P1B); Coat protein VP3 (P1C); Coat protein VP1 (P1D); Core protein P2A; Core protein P2B; Core protein P3A; Genome-linked protein VPG (P3B); Picornain 3C (EC 3.4.22.28) (Protease 3C); (P3C); RNA-directed RNA polymerase P3D (EC 2.7.7.48)].
 OS Bovine enterovirus (strain VG-5-27) (BEV).
 OC Virus: ssRNA viruses, no DNA stage; Picornaviridae;
 OC Enterovirus.
 OC NCBI_TAXID=12065;
 TN [1] SEQUENCE FROM N.A.
 RP MEDLINE=88117392; PubMed=2828511;
 RX Barile J.A.P., Skuce R.A., Fleming C.S., Hoey E.M., Martin S.J.;
 RX The complete nucleotide sequence of a bovine enterovirus.

ACT-SITE PROTEASE (POTENTIAL)

PT	STRAND	1692	26	PT	STRAND	503	506
PT	HELIx	36	38	PT	STRAND	510	515
PT	TURN	50	50	PT	STRAND	520	520
PT	HELIx	51	54	PT	TURN	523	524
PT	STRAND	57	57	PT	STRAND	528	537
PT	STRAND	83	87	PT	TURN	539	540
PT	TURN	88	89	PT	STRAND	542	546
PT	STRAND	90	94	PT	TURN	550	551
PT	STRAND	101	102	PT	STRAND	574	574
PT	HELIx	103	105	PT	STRAND	578	578
PT	TURN	113	115	PT	TURN	595	596
PT	STRAND	123	123	PT	STRAND	597	598
PT	HELIx	126	128	PT	HELIx	600	602
PT	TURN	129	129	PT	HELIx	610	613
PT	STRAND	133	134	PT	STRAND	619	619
PT	STRAND	138	139	PT	STRAND	624	624
PT	TURN	142	143	PT	HELIx	626	628
PT	STRAND	147	151	PT	STRAND	629	629
PT	TURN	152	152	PT	HELIx	630	634
PT	HELIx	153	155	PT	STRAND	638	641
PT	TURN	156	157	PT	STRAND	644	644
PT	HELIx	159	167	PT	TURN	647	649
PT	STRAND	168	180	PT	STRAND	651	655
PT	TURN	185	186	PT	HELIx	662	668
PT	STRAND	187	197	PT	TURN	669	670
PT	TURN	198	198	PT	STRAND	671	685
PT	HELIx	209	212	PT	STRAND	687	687
PT	HELIx	217	217	PT	TURN	689	690
PT	STRAND	219	220	PT	STRAND	693	693
PT	HELIx	224	226	PT	STRAND	699	705
PT	TURN	227	230	PT	TURN	707	708
PT	HELIx	234	238	PT	HELIx	718	721
PT	STRAND	241	245	PT	STRAND	727	731
PT	TURN	246	248	PT	TURN	732	733
PT	STRAND	251	256				
PT	STRAND	265	265				
PT	TURN	267	269				
PT	STRAND	270	270				
PT	STRAND	273	285				
PT	TURN	294	309				
PT	TURN	325	328				
PT	STRAND	332	333				
PT	STRAND	340	340				
PT	TURN	343	344				
PT	STRAND	356	357				
PT	STRAND	359	359				
PT	TURN	360	360				
PT	HELIx	361	364				
PT	TURN	365	365				
PT	STRAND	368	369				
PT	STRAND	375	375				
PT	TURN	376	377				
PT	STRAND	380	381				
PT	HELIx	382	384				
PT	STRAND	386	389				
PT	TURN	394	395				
PT	STRAND	397	402				
PT	TURN	407	408				
PT	STRAND	440	441				
PT	HELIx	410	413				
PT	STRAND	445	451				
PT	HELIx	461	464				
PT	STRAND	465	466				
PT	STRAND	468	473				
PT	STRAND	479	484				
PT	STRAND	493	494				
PT	TURN	499	502				

Query Match Score 7;保守性 100.0%; DB 1; Length 2175;

Best Local Similarity 100.0%; Matches 7;保守性 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 QAAETGA 7
DB 598 QAAETGA 604

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: NEEDLE & ROSENBURG #1000
999 PEACHTREE ST. #4424
ATLANTA GA 30309-4424
RETURN TO SENDER
ATLANTA GA 30309-4424
KLEED-127

AUG 10 2004

TECH CENTER 1600/2000

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